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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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|-----------------|-------------|----------------------|---------------------|------------------|

10/773,254

02/09/2004

Ken Saito

HITA.0505

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06/01/2006

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EXAMINER

TON, MINH TOAN T

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/773,254 | Applicant(s) SAITO ET AL. | |
| | Examiner Toan Ton | Art Unit 2871 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03/17/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Double Patenting

1. A terminal disclaimer filed 03/17/06 is acknowledged. An obviousness-type double patenting rejection is withdrawn.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imoto (US 5742366) in view of Takao (US 5546203).

Imoto discloses a liquid crystal display device comprising: a liquid crystal display panel; a luminaire disposed so as to irradiate the liquid crystal display panel with light, having at least one fluorescent lamp 13; and an upper frame and a lower frame sandwiching at least the liquid crystal display panel and at least the luminaire there between.

The limitation not disclosed by Imoto is the frame having at least one opening/pore.

Takao discloses a frame fixing a liquid crystal display board to an illuminating device, wherein the frame has a cutout corresponding to a light source for advantages such as releasing heat. Therefore, it would have been at least obvious to one of ordinary skill in the art to employ a housing and/or the lamp holder having an opening corresponding to at least one electrode portion of the lamp for advantages such as releasing heat.

The use of a double-piped cold fluorescent lamp is common and known for yielding several advantages such as suppressing heat generated, high luminance. Therefore, it would have been at least obvious to one of ordinary skill in the art at the time the invention was made to employ a double-piped cold fluorescent lamp, as common and known, for yielding several advantages such as suppressing heat generated, high luminance.

Imoto discloses the heat conduction means 11 and the lamp holder constituted by the same member, wherein the material comprises acrylic resin. Thus, the thermal conductivity of the acrylic resin (the lamp holder) is at least lower than the thermal conductivity of silicone rubber.

Response to Arguments

3. Applicant's arguments filed 03/17/06 have been fully considered but they are not persuasive.

Applicant's arguments are as follows:

(1) The prior of record fails to disclose the lower frame having at least one opening portion or at least one notch corresponding to at least one electrode portion of the at least one fluorescent lamp since the length of the light source appears longer than the length of the opening.

(2) The prior art of record fails to disclose a double-piped cold fluorescent lamp.

(3) The prior art of record fails to disclose the lamp holder, as claimed, but rather a holding means 12.

Examiner's responses to Applicant's arguments are as follows:

(1) Takao discloses a frame fixing a liquid crystal display board to an illuminating device, wherein the frame has a cutout corresponding to a light source for advantages such as releasing heat. Therefore, it would have been at least obvious to one of ordinary skill in the art to employ a housing and/or the lamp holder having an opening corresponding to at least one electrode portion of the lamp for advantages such as releasing heat. As presently claimed, limitation "corresponding" (e.g., in relation to) is recited in the claimed invention. No particular lengths' relationship(s) is made between the light source and the opening.

(2) The use of a double-piped cold fluorescent lamp is common and known in the art for yielding several advantages such as suppressing heat generated, high luminance (see at least page 4, last paragraph to page 5, 1st paragraph). Therefore, it would have been at least obvious to one of ordinary skill in the art at the time the invention was made to employ a double-piped cold fluorescent lamp yields several advantages such as suppressing heat generated, high luminance.

(3) Imoto discloses the heat conduction means 11 and the lamp holder (e.g., holding means) constituted by the same member, wherein the material comprises acrylic resin. Thus, the thermal conductivity of the acrylic resin (the lamp holder) is at least lower than the thermal conductivity of silicone rubber. As presently claimed, the lamp holder does not recite directly holding the lamp.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan Ton whose telephone number is (571) 272-2303.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 25, 2006


TOANTON
PRIMARY EXAMINER